Index Of Contents—2004

ATM (Asynchronous Transfer Mode)

The Procrastination Penalty, March, pp. 66–65
Are The RBOCs Making Their Move? May, p. 12
What's The Fate Of Frame? July, pp. 36–38
Today's Hybrid IP-VPN Market, October, pp. 12–13
ATM's Last Carrier Gasp? December. pp. 8–9

BCR Test

Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Small IP-PBXs: Another Close Race, April, pp. 36–51
In Search Of The Smartest Sentry, August, pp. 54–59
In Search Of The VOIP Killer App, September, pp. 20–29
Taking Control Of Your Airwaves, October, pp. 24–32

Billing/Call Accounting

IT Cost Cutting: Trends In The Trenches, January, pp. 47–49
Controlling Cellular Costs, February, p. 66
Best Practices In Managing Wireless Communications, June, pp. 46–48
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
Cost Control And Converged Networks, July, pp. 28–31
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35

Briefing

Wireless LAN Market Magic, January, p. 12
Can IP-PBXs Go Open Source? February, p. 12
Don't Let Your Network Sink An M&A, March, p. 12
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Are The RBOCs Making Their Move? May, p. 12
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Cellphone Viruses: How Worried Should You Be? July, p. 14
Policy: With Or Without Acronym? August, pp. 10–12
Preparing For Converged Mobile Communications, September, p. 12
Today's Hybrid IP-VPN Market, October, pp. 12–13
MPLS Migration: A Customer Story, November, pp. 14–15

By The Numbers

New Segments Increase, January, p. 8
Service Providers Increase Router Sales, January, p. 8
Gigabit Over Copper Surges, January, p. 8
Enterprise VOIP Line Market Share, January, p. 8
802.11g Drives Growth, April, p. 8
Strong Growth In Server Load Balancing, April, p. 8
10-Gigabit Ethernet Prices Plummet, April, p. 8
IP Telephone Market Share, April, p. 8
Broadband Subscribership Grows, July, p. 16
Wireless LAN Grows Through Broadband, July, p. 16
DSL CPE Prices Stabilize With More Functions, July, p. 16
Cable CPE Grows With Voice, July, p. 16
IP-Telephony Drives Growth In Several Segments, October, p. 8
Switch/Server/Appliances Gain Share in WLAN Market, October, p. 8
Modular SAN Switch Vendor Share, October, p. 8
Optical Transport Revenue, October, p. 8

Cable Modems

Wireless Data Comes Of Age, March, pp. 8-10
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Shifts In Spending—Consumer Market, September, pp. 66–65
IP: The Telcos' Secret Weapon To Beat Cable, November, p. 63

Call Centers

The Erlang G CRM/Contact Center Forecasting Technique, January, pp. 54–60
Beyond The Wired Desktop Telephone, February, pp. 41–44
Time Accounting In The Contact Center, July 2004, pp. 44–47
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
IP Call Centers: More Practical Than You Think, August, pp. 24–27
The Balancing Act: Using Touch-tone And Speech, November, pp. 58–59
Avaya Aims At Mid-Sized Contact Center, December, p.60

Carriers/Service Providers

Looking Into Carrier Networks, February, p. 4
CIOs' Balancing Act, February, pp. 8–10
Extending The VOIP Network Boundary, February, pp. 22–25
Controlling Cellular Costs, February, p. 66
Wireless Data Comes Of Age, March, pp. 8–10
Ready Or Not, Video Chat Is Here, March, pp. 14–16
A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Strategic Planning In Times Of Turmoil, March, pp. 56–59
The Procrastination Penalty, March, pp. 66–65
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Managing The Migration To IP-VPN Services, April, pp. 19–23
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
What Are These People Thinking? April, pp. 66–65
Is It Time To Make The Network Smarter? May, pp. 8-10
Are The RBOCs Making Their Move? May, p. 12
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
Will SONET Changes Change The Future? June, pp. 8-9
Ethernet At The Multiservice Edge, June, pp. 18–22
Is Fiber To The Home Affordable? June, pp. 24–28
A New View Of The Infrastructure, June, pp. 38–41
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
A New Era In Telecom Regulation, July, pp. 20–23
The Gloves Are Off In Plain Old LD Voice, July, pp. 24–26
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Metro Ethernet Offers Opex Gains, July, pp. 40–43
You Can Do Something About The Growing Universal Service Burden, July, pp. 48–53
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Local Realities Govern Global Telecom, July, p. 66
Is Telecom Competition Dead? August, pp. 8–9
Managed Services: Lessons From The Field, August, pp. 34–38
Carriers Extend And Expand Managed Services, August, pp. 39–44
Lies, Phones And UNE-P, August, pp. 66–65
VOIP Regulation For Dummies, September, pp. 14–16
How To Negotiate An MPLS Contract, September, pp. 48–53

Index Of Contents—2004

ATM (Asynchronous Transfer Mode)

The Procrastination Penalty, March, pp. 66–65
Are The RBOCs Making Their Move? May, p. 12
What's The Fate Of Frame? July, pp. 36–38
Today's Hybrid IP-VPN Market, October, pp. 12–13
ATM's Last Carrier Gasp? December. pp. 8–9

BCR Test

Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Small IP-PBXs: Another Close Race, April, pp. 36–51
In Search Of The Smartest Sentry, August, pp. 54–59
In Search Of The VOIP Killer App, September, pp. 20–29
Taking Control Of Your Airwaves, October, pp. 24–32

Billing/Call Accounting

IT Cost Cutting: Trends In The Trenches, January, pp. 47–49
Controlling Cellular Costs, February, p. 66
Best Practices In Managing Wireless Communications, June, pp. 46–48
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
Cost Control And Converged Networks, July, pp. 28–31
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35

Briefing

Wireless LAN Market Magic, January, p. 12
Can IP-PBXs Go Open Source? February, p. 12
Don't Let Your Network Sink An M&A, March, p. 12
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Are The RBOCs Making Their Move? May, p. 12
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Cellphone Viruses: How Worried Should You Be? July, p. 14
Policy: With Or Without Acronym? August, pp. 10–12
Preparing For Converged Mobile Communications, September, p. 12
Today's Hybrid IP-VPN Market, October, pp. 12–13
MPLS Migration: A Customer Story, November, pp. 14–15

By The Numbers

New Segments Increase, January, p. 8
Service Providers Increase Router Sales, January, p. 8
Gigabit Over Copper Surges, January, p. 8
Enterprise VOIP Line Market Share, January, p. 8
802.11g Drives Growth, April, p. 8
Strong Growth In Server Load Balancing, April, p. 8
10-Gigabit Ethernet Prices Plummet, April, p. 8
IP Telephone Market Share, April, p. 8
Broadband Subscribership Grows, July, p. 16
Wireless LAN Grows Through Broadband, July, p. 16
DSL CPE Prices Stabilize With More Functions, July, p. 16
Cable CPE Grows With Voice, July, p. 16
IP-Telephony Drives Growth In Several Segments, October, p. 8
Switch/Server/Appliances Gain Share in WLAN Market, October, p. 8
Modular SAN Switch Vendor Share, October, p. 8
Optical Transport Revenue, October, p. 8

Cable Modems

Wireless Data Comes Of Age, March, pp. 8-10
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Shifts In Spending—Consumer Market, September, pp. 66–65
IP: The Telcos' Secret Weapon To Beat Cable, November, p. 63

Call Centers

The Erlang G CRM/Contact Center Forecasting Technique, January, pp. 54–60
Beyond The Wired Desktop Telephone, February, pp. 41–44
Time Accounting In The Contact Center, July 2004, pp. 44–47
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
IP Call Centers: More Practical Than You Think, August, pp. 24–27
The Balancing Act: Using Touch-tone And Speech, November, pp. 58–59
Avaya Aims At Mid-Sized Contact Center, December, p.60

Carriers/Service Providers

Looking Into Carrier Networks, February, p. 4
CIOs' Balancing Act, February, pp. 8–10
Extending The VOIP Network Boundary, February, pp. 22–25
Controlling Cellular Costs, February, p. 66
Wireless Data Comes Of Age, March, pp. 8–10
Ready Or Not, Video Chat Is Here, March, pp. 14–16
A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Strategic Planning In Times Of Turmoil, March, pp. 56–59
The Procrastination Penalty, March, pp. 66–65
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Managing The Migration To IP-VPN Services, April, pp. 19–23
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
What Are These People Thinking? April, pp. 66–65
Is It Time To Make The Network Smarter? May, pp. 8-10
Are The RBOCs Making Their Move? May, p. 12
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
Will SONET Changes Change The Future? June, pp. 8-9
Ethernet At The Multiservice Edge, June, pp. 18–22
Is Fiber To The Home Affordable? June, pp. 24–28
A New View Of The Infrastructure, June, pp. 38–41
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
A New Era In Telecom Regulation, July, pp. 20–23
The Gloves Are Off In Plain Old LD Voice, July, pp. 24–26
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Metro Ethernet Offers Opex Gains, July, pp. 40–43
You Can Do Something About The Growing Universal Service Burden, July, pp. 48–53
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Local Realities Govern Global Telecom, July, p. 66
Is Telecom Competition Dead? August, pp. 8–9
Managed Services: Lessons From The Field, August, pp. 34–38
Carriers Extend And Expand Managed Services, August, pp. 39–44
Lies, Phones And UNE-P, August, pp. 66–65
VOIP Regulation For Dummies, September, pp. 14–16
How To Negotiate An MPLS Contract, September, pp. 48–53

Shifts In Spending—Consumer Market, September, pp. 66–65
The Murky World Of VOIP, October, pp. 10–11
Today's Hybrid IP-VPN Market, October, pp. 12–13
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Don't Gloat Over The Carriers' Troubles, October, p. 66
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
MPLS Migration: A Customer Story, November, pp. 14–15
Telecom In Developing Nations, November, pp. 18–20
Negotiating Managed Network Contracts, November, pp. 22–26
IP: The Telcos' Secret Weapon To Beat Cable, November, p. 63
ATM's Last Carrier Gasp? December. pp. 8–9
Procuring Managed IP-VPNs, December, pp. 24–26
The MPLS UNI And End-To-End QOS, December, pp. 27–32

Conferencing

The Battle For The Enterprise Collaboration Desktop, June, pp. 10_12
In Search Of The VOIP Killer App, September, pp. 20–29
A Collaboration Culture? November, p. 2
New Paradigms In Enterprise Video, November, pp. 38–41
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42

Consultant's Corner/Kuehn

Shifting Responsibilities, January, p. 66
Controlling Cellular Costs, February, p. 66
The Procrastination Penalty, March, pp. 66–65
What Are These People Thinking? April, pp. 66–65
IP-Telephony—New Technology, Familiar Motivations, May, pp. 66–65
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
Local Realities Govern Global Telecom, July, p. 66
Lies, Phones And UNE-P, August, pp. 66–65
Shifts In Spending—Consumer Market, September, pp. 66–65
Don't Gloat Over The Carriers' Troubles, October, p. 66
Telecom Asia: Shape Of Tomorrow's Telecom, November, p. 66

DSL (Digital Subscriber Line)

Wireless Data Comes Of Age, March, pp. 8–10
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Are The RBOCs Making Their Move? May, p. 12
A New Era In Telecom Regulation, July, pp. 20–23
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Lies, Phones And UNE-P, August, pp. 66–65
Shifts In Spending—Consumer Market, September, pp. 66–65
The Murky World Of VOIP, October, pp. 10–11
Taxing VOIP: Consider The Alternative, October, pp. 14–15
ATM's Last Carrier Gasp? December. pp. 8–9
Procuring Managed IP-VPNs, December, pp. 24–26

Ecommerce

CIOs' Balancing Act, February, pp. 8–10
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52–55
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
New Tools For Web Services Management, April, pp. 52–57
What Are These People Thinking? April, pp. 66–65
Portlet Standards Accelerate Web Portal Development, July, pp. 57–61
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
RFID: Network Implications, November, pp. 16–17
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

Ethernet

Extreme Networks' Gigabit Edge Switch, February, p. 64
Gigabit Desktop Transition: Where Are We? March, pp. 38–41
Foundry Switch Slashes 10-Gig Price, April, p. 62
Are The RBOCs Making Their Move? May, p. 12
Ethernet At The Multiservice Edge, June, pp. 18–22
Metro Ethernet Offers Opex Gains, July, pp. 40–43
Metro Ethernet Provides 911 For Bandwidth, August, pp. 60–62
Layer 1 Switches Offer Resiliency, November, pp. 54–57
Foundry Expands 10-Gig Offerings, December, p. 61

Frame Relay

A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
The Procrastination Penalty, March, pp. 66–65
Managing The Migration To IP-VPN Services, April, pp. 19–23
Are The RBOCs Making Their Move? May, p. 12
On The WAN Or On The Wane? June, p. 4
What's The Fate Of Frame? July, pp. 36–38
Switching vs. Routing Redux (Part II), August, pp. 14–15
Managed Services: Lessons From The Field, August, pp. 34–38
Carriers Extend And Expand Managed Services, August, pp. 39–44
How To Negotiate An MPLS Contract, September, pp. 48–53
Today's Hybrid IP-VPN Market, October, pp. 12–13
MPLS Migration: A Customer Story, November, pp. 14–15
Negotiating Managed Network Contracts, November, pp. 22–26
ATM's Last Carrier Gasp? December. pp. 8–9
Procuring Managed IP-VPNs, December, pp. 24–26

IMHO

Traffic Shaping Doesn't Have To Be A Zero-Sum Game, March, p. 62
Location Tracking Increases The Value Of Enterprise WLANs, May, p. 14
Don't Outsource—Virtualize, May, p. 56
The Case For Automation In Security, July, p. 64
Web Telephony: It's What's Next, August, p. 63
Videoconferencing Over IP—The Switch Is On, September, p. 62
IP: The Telcos' Secret Weapon To Beat Cable, November, p. 63
Applications Go Wireless: The New Mobility Wave, December, pp. 58–59

International Issues

Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Local Realities Govern Global Telecom, July, p. 66
Better Than Nothing, November, p. 4
Telecom In Developing Nations, November, pp. 18–20
Telecom Asia: Shape Of Tomorrow's Telecom, November, p. 66

Internet Infrastructure

CIOs' Balancing Act, February, pp. 8–10
Are Smart Networks Dumb? February, pp. 14–15
Rethinking Network Security, February, pp. 16–20
Extending The VOIP Network Boundary, February, pp. 22–25
Wireless Data Comes Of Age, March, pp. 8–10
Ready Or Not, Video Chat Is Here, March, pp. 1416
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33

An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
New Tools For Web Services Management, April, pp. 52–57
Optical Market: Headed For Consolidation? April, pp. 58–60
Is It Time To Make The Network Smarter? May, pp. 8–10
Locking Down The Net, May, pp. 16–18
High Availability In Routing, May, pp. 48–51
The Public Internet: Good Enough? June, pp. 14–16
Ethernet At The Multiservice Edge, June, pp. 18–22
A New View Of The Infrastructure, June, pp. 38–41
The Application Delivery System Market, July, pp. 10–12
Switching vs. Routing Redux (Part I), July, pp. 18–19
Portlet Standards Accelerate Web Portal Development, July, pp. 57–61
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
Shifts In Spending—Consumer Market, September, pp. 66–65
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
RFID: Network Implications, November, pp. 16–17
Enemy At The Gates: The Evolution Of Network Security, December, pp. 14–18
The NAT Traversal Problem, December pp. 12–13
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

IP (Internet Protocol)

IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Can IP-PBXs Go Open Source? February, p. 12
Are Smart Networks Dumb? February, pp. 14–15
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
Locking Down The Net, May, pp. 16–18
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
Switching vs. Routing Redux (Part I), July, pp. 18–19
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
The NAT Traversal Problem, December pp. 12–13

ISPs (Internet Service Providers)

Extending The VOIP Network Boundary, February, pp. 22–25
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Ready Or Not, Video Chat Is Here, March, pp. 14–16
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
Is It Time To Make The Network Smarter? May, pp. 8–10
The Public Internet: Good Enough? June, pp. 14–16
A New View Of The Infrastructure, June, pp. 38–41
Carriers Extend And Expand Managed Services, August, pp. 39–44
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
Shifts In Spending—Consumer Market, September, pp. 66–65
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
Enemy At The Gates: The Evolution Of Network Security, December, pp. 14–18
Procuring Managed IP-VPNs, December, pp. 24–26
The MPLS UNI And End-To-End QOS, December, pp. 27–32

Management Issues/Trends

A Sea Change In Network Technology Planning, January, pp. 10–11
Treating WLAN Users As Hostile, pp. 14–15
Self-Configuring Networks, January, pp. 16–17
IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Getting Voice On Your Wireless LAN, January, pp. 41–46
IT Cost Cutting: Trends In The Trenches, January, pp. 47–49
Instant Messaging: Time For IT To Pay Attention, January, pp. 50–53
The Erlang G CRM/Contact Center Forecasting Technique, January, pp. 54–60
Shifting Responsibilities, January, p. 66
Futile Pursuit Of Simplicity? February, p. 2
CIOs' Balancing Act, February, pp. 8–10
Are Smart Networks Dumb? February, pp. 14–15
Rethinking Network Security, February, pp. 16–20
Extending The VOIP Network Boundary, February, pp. 22–25
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Beyond The Wired Desktop Telephone, February, pp. 41–44
IP-Telephony Applications: What's All The Fuss? February, pp. 46–51
Power Protection—Pay A Little Now, Or A Lot Later, February, pp. 52–56
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Controlling Cellular Costs, February, p. 66
Don't Let Your Network Sink An M&A, March, p. 12
Ready Or Not, Video Chat Is Here, March, pp. 14–16
Planning Steps For Wireless LANs, March, pp. 18–20
A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Understanding Wi-Fi Performance, March, pp.34–37
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52–55
Strategic Planning In Times Of Turmoil, March, pp. 56–59
Traffic Shaping Doesn't Have To Be A Zero-Sum Game, March, p. 62
The Procrastination Penalty, March, pp. 66–65
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
Small IP-PBXs: Another Close Race, April, pp. 36–51
New Tools For Web Services Management, April, pp. 52–57
Locking Down The Net, May, pp. 16–18
Designing Converged Networks For Manageability, May, pp. 24–28
Building A Credible And Conservative ROI For VOIP, May, pp. 30–32
Open Source: A New IP-PBX Option, May, pp. 36–39
The Future Of Presence, May, pp. 40–43

MPLS: Has It Achieved Critical Mass? May, pp. 44–47
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
IP-Telephony—New Technology, Familiar Motivations, May, pp. 66–65
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
The Public Internet: Good Enough? June, pp. 14–16
Ethernet At The Multiservice Edge, June, pp. 18–22
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42–45
Best Practices In Managing Wireless Communications, June, pp. 46–48
Managing The Challenges Of Application Services, June, pp. 50–55
Billing Accuracy: Still Miserable After All These Years, June, pp. 66–65
Follow The Money, July, p. 4
The Application Delivery System Market, July, pp. 10–12
Cellphone Viruses: How Worried Should You Be? July, p. 14
Switching vs. Routing Redux (Part I), July, pp. 18–19
The Gloves Are Off In Plain Old LD Voice, July, pp. 24–26
Cost Control And Converged Networks, July, pp. 28–31
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Time Accounting In The Contact Center, July, pp. 44–47
You Can Do Something About The Growing Universal Service Burden, July, pp. 48–53
Local Realities Govern Global Telecom, July, p. 66
Policy: With Or Without Acronym? August, pp. 10–12
Switching vs. Routing Redux (Part II), August, pp. 14–15
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
IP Call Centers: More Practical Than You Think, August, pp. 24–27
Managed Services: Lessons From The Field, August, pp. 34–38
Enabling Enterprise Wi-Fi, August, pp. 45–53
In Search Of The Smartest Sentry, August, pp. 54–59
Innovation Diffusion, September, pp. 8–11
Preparing For Converged Mobile Communications, September, p. 12
In Search Of The VOIP Killer App, September, pp. 20–29
VOIP Doesn't Matter, September, pp. 30–33
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
How To Negotiate An MPLS Contract, September, pp. 48–53
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Taking Control Of Your Airwaves, October, pp. 24–32
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Messaging Compliance: Why It Matters, October, pp. 39–43
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
E-911:Costs, Benefits and Pitfalls, November, pp. 60–62
The Balancing Act: Using Touch-tone And Speech, November, pp. 58–59
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
MPLS Migration: A Customer Story, November, pp. 14–15
RFID: Network Implications, November, pp. 16–17
Negotiating Managed Network Contracts, November, pp. 22–26
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
Overcoming MPLS VPN Application Classification Challenges, November, pp. 34–36
New Paradigms In Enterprise Video, November, pp. 38–41
Getting The IP-PBX To Work: Fire, Ready, Aim, November, pp. 42–45
Layer 1 Switches Offer Resiliency, November, pp. 54–57
Telecom Asia: Shape Of Tomorrow's Telecom, November, p. 66
Enemy At The Gates: The Evolution Of Network Security, December, pp. 14–18
The NAT Traversal Problem, December pp. 12–13
Portable Security: Safeguarding PDAs And Smartphones, December, pp. 19–23
Procuring Managed IP-VPNs, December, pp. 24–26
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42
Ready! Getting the IP-PBX To Work: Plan, Then Assess, December, pp. 43–46

Market Trends

Wireless LAN Market Magic, January, p. 12
IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Can IP-PBXs Go Open Source? February, p. 12
Beyond The Wired Desktop Telephone, February, pp. 41–44
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Ready Or Not, Video Chat Is Here, March, pp. 14–16
A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Gigabit Desktop Transition: Where Are We? March, pp. 38–41
Managing The Migration To IP-VPN Services, April, pp. 19–23
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
SIP State Of Affairs, April, pp. 30–35
Optical Market: Headed For Consolidation? April, pp. 58–60
Foundry Switch Slashes 10-Gig Price, April, p. 62
Are The RBOCs Making Their Move? May, p. 12
Open Source: A New IP-PBX Option, May, pp. 36–39
The Future Of Presence, May, pp. 40–43
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
Interactive IP Telephone Capabilities, May, pp. 58–62
The Half-Full Cup, June, p. 2
Will SONET Changes Change The Future? June, pp. 8–9
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
WiMax Hits The Road, June, pp. 30–37
Next-Gen Firewalls: What To Expect, June, pp. 56–61
The Application Delivery System Market, July, pp. 10–12
The Gloves Are Off In Plain Old LD Voice, July, pp. 24–26
What's The Fate Of Frame? July, pp. 36–38
Understanding Vendor Strategies For VOIP, August, pp. 28–32
Carriers Extend And Expand Managed Services, August, pp. 39–44
Enabling Enterprise Wi-Fi, August, pp. 45–53
WLANs And Cellular Unite, September, pp. 18–19
VOIP Doesn't Matter, September, pp. 30–33
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
How To Negotiate An MPLS Contract, September, pp. 48–53
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Shifts In Spending—Consumer Market, September, pp. 66–65
The Murky World Of VOIP, October, pp. 10–11
Today's Hybrid IP-VPN Market, October, pp. 12–13
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
Don't Gloat Over The Carriers' Troubles, October, p. 66
MPLS Migration: A Customer Story, November, pp. 14–15
Negotiating Managed Network Contracts, November, pp. 22–26
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
New Paradigms In Enterprise Video, November, pp. 38–41
WiMax: Broadband Wireless Access And Beyond, November, pp. 46–53
The Balancing Act: Using Touch-tone And Speech, November, pp. 58–59

ATM's Last Carrier Gasp? December. pp. 8–9
Portable Security: Safeguarding PDAs And Smartphones, December, pp. 19–23
Procuring Managed IP-VPNs, December, pp. 24–26
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42
Avaya Aims At Mid-Sized Contact Center, December, p.60
Foundry Expands 10-Gig Offerings, December, p. 61

Messaging

Instant Messaging: Time For IT To Pay Attention, January, pp. 50–53
Ready Or Not, Video Chat Is Here, March, pp. 14–16
Time To Pony Up For Email? April, p. 4
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
What Are These People Thinking? April, pp. 66–65
Spam—Help Is On The Way, May, p. 2
The Future Of Presence, May, pp. 40–43
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Preparing For Converged Mobile Communications, September, p. 12
In Search Of The VOIP Killer App, September, pp. 20–29
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Messaging Compliance: Why It Matters, October, pp. 39–43
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42

MPLS (Multiprotocol Label Switching)

Managing The Migration To IP-VPN Services, April, pp. 19–23
Are The RBOCs Making Their Move? May, p. 12
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
What's The Fate Of Frame? July, pp. 36–38
Switching vs. Routing Redux (Part II), August, pp. 14–15
Managed Services: Lessons From The Field, August, pp. 34–38
How To Negotiate An MPLS Contract, September, pp. 48–53
Today's Hybrid IP-VPN Market, October, pp. 12–13
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
MPLS Migration: A Customer Story, November, pp. 14–15
Negotiating Managed Network Contracts, November, pp. 22–26
Overcoming MPLS VPN Application Classification Challenges, November, pp. 34–36
ATM's Last Carrier Gasp? December. pp. 8–9
The MPLS UNI And End-To-End QOS, December, pp. 27–32

Network/Application Performance

Getting Voice On Your Wireless LAN, January, pp. 41–46
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Understanding Wi-Fi Performance, March, pp.34–37
Traffic Shaping Doesn't Have To Be A Zero-Sum Game, March, p. 62
Bandwidth Bag Of Tricks, April, pp. 17–18
New Tools For Web Services Management, April, pp. 52–57
Is It Time To Make The Network Smarter? May, pp. 8–10
Designing Converged Networks For Manageability, May, pp. 24–28
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
The Public Internet: Good Enough? June, pp. 14–16
Managing The Challenges Of Application Services, June, pp. 50–55
The Application Delivery System Market, July, pp. 10–12
Visual Networks Moving Up To Higher Layers, July, p. 63
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38
Ready! Getting the IP-PBX To Work: Plan, Then Assess, December, pp. 43–46

Network Architect/Passmore

Treating WLAN Users As Hostile, January, pp. 14–15
Are Smart Networks Dumb? February, pp. 14–15
Ready Or Not, Video Chat Is Here, March, pp. 14–16
Bandwidth Bag Of Tricks, April, pp. 17–18
Locking Down The Net, May, pp. 16–18
The Public Internet: Good Enough? June, pp. 14–16
Switching vs. Routing Redux (Part I), July, pp. 18–19
Switching vs. Routing Redux (Part II), August, pp. 14–15
VOIP Regulation For Dummies, September, pp. 14–16
Taxing VOIP: Consider The Alternative, October, pp. 14–15
RFID: Network Implications, November, pp. 16–17
The NAT Traversal Problem, December pp. 12–13

Network Architecture/Design

Self-Configuring Networks, January, pp. 16–17
Are Smart Networks Dumb? February, pp. 14–15
Extending The VOIP Network Boundary, February, pp. 22–25
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Don't Let Your Network Sink An M&A, March, p. 12
Understanding Wi-Fi Performance, March, pp.34–37
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
Is It Time To Make The Network Smarter? May, pp. 8–10
Designing Converged Networks For Manageability, May, pp. 24–28
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
Will SONET Changes Change The Future? June, pp. 8–9
The Public Internet: Good Enough? June, pp. 14–16
Ethernet At The Multiservice Edge, June, pp. 18–22
A New View Of The Infrastructure, June, pp. 38–41
Siemens Targets Centralized VOIP, June, pp. 62–63
EADS Telecom Debuts Newest Converged Platform, June, p. 63
The Application Delivery System Market, July, pp. 10–12
Switching vs. Routing Redux (Part I), July, pp. 18–19
Switching vs. Routing Redux (Part II), August, pp. 14–15
Enabling Enterprise Wi-Fi, August, pp. 45–53
In Search Of The VOIP Killer App, September, pp. 20–29
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
MPLS Migration: A Customer Story, November, pp. 14–15
RFID: Network Implications, November, pp. 16–17
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
Layer 1 Switches Offer Resiliency, November, pp. 54–57
The MPLS UNI And End-To-End QOS, December, pp. 27–32

Network Crossroads/Nolle

CIOs' Balancing Act, February, pp. 8–10
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
Will SONET Changes Change The Future? June, pp. 8–9
Is Telecom Competition Dead? August, pp. 8–9
The Murky World Of VOIP, October, pp. 10–11
ATM's Last Carrier Gasp? December. pp. 8–9

Network Forecasts/Sevcik

A Sea Change In Network Technology Planning, January, pp. 10–11
Wireless Data Comes Of Age, March, pp. 8–10
Is It Time To Make The Network Smarter? May, pp. 8–10
The Application Delivery System Market, July, pp. 10–12
Innovation Diffusion, September, pp. 8–11
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12

Network Management

A Sea Change In Network Technology Planning, January, pp. 10–11
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Application Performance Measurement: The State Of The Art, February, pp. 57-63
An Evolving Architecture For The Manage ment Of Digital Identity, March, pp. 42-48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52-55
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24-29
Small IP-PBXs: Another Close Race, April, pp. 36-51
New Tools For Web Services Management, April, pp. 52-57
Admission Control For Mission-Critical Nets, May, p. 4
Designing Converged Networks For Manage ability, May, pp. 24-28
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42-45
Best Practices In Managing Wireless Communications, June, pp. 46-48
Managing The Challenges Of Application Services, June, pp. 50-55
Visual Networks Moving Up To Higher Layers, July, p. 63
Policy: With Or Without Acronym? August, pp. 10-12
Managed Services: Lessons From The Field, August, pp. 34-38
Carriers Extend And Expand Managed Services, August, pp. 39-44
Enabling Enterprise Wi-Fi, August, pp. 45-53
In Search Of The VOIP Killer App, September, pp. 20-29
Real vs. Synthetic Measurements Of Performance, November, pp. 8-12
Negotiating Managed Network Contracts, November, pp. 22-26
Getting The IP-PBX To Work: Fire, Ready, Aim, November, pp. 42-45
Ready! Getting the IP-PBX To Work: Plan, Then Assess, December, pp. 43–46

Networking Intelligence/ Finneran

Self-Configuring Networks, January, pp. 16–17
Planning Steps For Wireless LANs, March, pp. 18–20
The End Of Spectrum Scarcity? May, pp. 20–22
A New Era In Telecom Regulation, July, pp. 20–23
WLANs And Cellular Unite, September, pp. 18–19
Telecom In Developing Nations, November, pp. 18–20

Open Source

Can IP-PBXs Go Open Source? February, p. 12
Open Source: A New IP-PBX Option, May, pp. 36–39
Open Voices: Linux And VoiceXML In The Call Center, August 2004, pp. 16–22

Optical Networking

Optical Market: Headed For Consolidation? April, pp. 58–60
Will SONET Changes Change The Future? June, pp. 8-9
Is Fiber To The Home Affordable? June, pp. 24–28
Metro Ethernet Offers Opex Gains, July, pp. 40–43
Metro Ethernet Provides 911 For Bandwidth, August, pp. 60–62
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56

Outsourcing

Strategic Planning In Times Of Turmoil, March, pp. 56–59
Don't Outsource—Virtualize, May, p. 56
Managed Services: Lessons From The Field, August, pp. 34–38
Carriers Extend And Expand Managed Services, August, pp. 39–44
Negotiating Managed Network Contracts, November, pp. 22–26

PBXs

IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Can IP-PBXs Go Open Source? February, p. 12
Extending The VOIP Network Boundary, February, pp. 22–25
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Beyond The Wired Desktop Telephone, February, pp. 41–44
IP-Telephony Applications: What's All The Fuss? February, pp. 46–51
Power Protection—Pay A Little Now, Or A Lot Later, February, pp. 52–56
NEC Introduces New Platform Offerings, March, pp. 60–61
SIP State Of Affairs, April, pp. 30–35
Small IP-PBXs: Another Close Race, April, pp. 36–51
Building A Credible And Conservative ROI For VOIP, May, pp. 30–32
Open Source: A New IP-PBX Option, May, pp. 36–39
The Future Of Presence, May, pp. 40–43
Interactive IP Telephone Capabilities, May, pp. 58–62
IP-Telephony—New Technology, Familiar Motivations, May, pp. 66–65
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42–45
Siemens Targets Centralized VOIP, June, pp. 62–63
EADS Telecom Debuts Newest Converged Platform, June, p. 63
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
IP Call Centers: More Practical Than You Think, August, pp. 24–27
Understanding Vendor Strategies For VOIP, August, pp. 28–32
WLANs And Cellular Unite, September, pp. 18–19
In Search Of The VOIP Killer App, September, pp. 20–29
VOIP Doesn't Matter, September, pp. 30–33
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Nortel Enhances Enterprise Portfolio, October, pp. 62–63
New Paradigms In Enterprise Video, November, pp. 38–41
Getting The IP-PBX To Work: Fire, Ready, Aim, November, pp. 42–45
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42
Ready! Getting the IP-PBX To Work: Plan, Then Assess, December, pp. 43–46
Avaya Aims At Mid-Sized Contact Center, December, p.60

Private Lines

A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
The Procrastination Penalty, March, pp. 66–65
Today's Hybrid IP-VPN Market, October, pp. 12–13

Product Comparisons

IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
Small IP-PBXs: Another Close Race, April, pp. 36–51
Interactive IP Telephone Capabilities, May, pp. 58–62
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Next-Gen Firewalls: What To Expect, June, pp. 56–61
In Search Of The Smartest Sentry, August, pp. 54–59
In Search Of The VOIP Killer App, September, pp. 20–29
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Taking Control Of Your Airwaves, October, pp. 24–32
SSL VPNs—An Independent Taxonomy, November, pp. 28–33

Product Review

Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Extreme Networks' Gigabit Edge Switch, February, p. 64
NEC Introduces New Platform Offerings, March, pp. 60–61
Foundry Switch Slashes 10-Gig Price, April, p. 62
Interactive IP Telephone Capabilities, May, pp. 58–62
Siemens Targets Centralized VOIP, June, pp. 62–63
EADS Telecom Debuts Newest Converged Platform, June, p. 63
Juniper Targets "Customer Edge" With New Routers, July, p. 62
Visual Networks Moving Up To Higher Layers, July, p. 63
Motorola, Proxim, Avaya Team For Mobility, September, pp. 60–61
Nortel Enhances Enterprise Portfolio, October, pp. 62–63
Avaya Aims At Mid-Sized Contact Center, December, p.60
Foundry Expands 10-Gig Offerings, December, p. 61
3Com Debuts Convergence App Suite, December, p. 62

Protocols

Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Can IP-PBXs Go Open Source? February, p. 12
Are Smart Networks Dumb? February, pp. 14–15
Extending The VOIP Network Boundary, February, pp. 22–25
Beyond The Wired Desktop Telephone, February, pp. 41–44
Public ENUM—How Important Is It? March, pp. 26–30
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52–55
Proprietary SIP, April, p. 2
SIP State Of Affairs, April, pp. 30–35
Small IP-PBXs: Another Close Race, April, pp. 36–51
New Tools For Web Services Management, April, pp. 52–57
The Future Of Presence, May, pp. 40–43
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
Interactive IP Telephone Capabilities, May, pp. 58–62
Ethernet At The Multiservice Edge, June, pp. 18–22
WiMax Hits The Road, June, pp. 30–37
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42–45
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
WiMax: Broadband Wireless Access And Beyond, November, pp. 46–53
The NAT Traversal Problem, December pp. 12–13
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

Public Interest

Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
What Are These People Thinking? April, pp. 66–65
The End Of Spectrum Scarcity? May, pp. 20–22
Is Fiber To The Home Affordable? June, pp. 24–28
A New Era In Telecom Regulation, July, pp. 20–23
You Can Do Something About The Growing Universal Service Burden, July, pp. 48–53
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Is Telecom Competition Dead? August, pp. 8–9
Lies, Phones And UNE-P, August, pp. 66–65
VOIP Regulation For Dummies, September, pp. 14–16
Taxing VOIP: Consider The Alternative, October, pp. 14-15
Messaging Compliance: Why It Matters, October, pp. 39–43
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
E-911:Costs, Benefits and Pitfalls, November, pp. 60–62
Telecom In Developing Nations, November, pp. 18–20
Telecom Asia: Shape Of Tomorrow's Telecom, November, p. 66

QOS (Quality of Service)

Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Beyond The Wired Desktop Telephone, February, pp. 41–44
Application Performance Measurement: The State Of The Art, February, pp. 57–63
Understanding Wi-Fi Performance, March, pp.34–37
Traffic Shaping Doesn't Have To Be A Zero-Sum Game, March, p. 62
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
Small IP-PBXs: Another Close Race, April, pp. 36–51
Is It Time To Make The Network Smarter? May, pp. 8–10
The Public Internet: Good Enough? June, pp. 14–16
The Application Delivery System Market, July, pp. 10–12
QOS—And Economics, October, p. 4
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Real vs. Synthetic Measurements Of Performance, November, pp. 8–12
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

Regulation/Public Policy

Never Throw Anything Away, February, p. 4
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16

Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
What Are These People Thinking? April, pp. 66–65
The End Of Spectrum Scarcity? May, pp. 20–22
Is Fiber To The Home Affordable? June, pp. 24–28
Universal Service For The Next Century, July, p. 6A New Era In Telecom Regulation, July, pp. 20–23
You Can Do Something About The Growing Universal Service Burden, July, pp. 48–53
Broadband UNEs: Was There Ever A Fair Regulatory Solution, Anyway? July, pp. 54–56
Regulatory Reform, Again, August, p. 4
Is Telecom Competition Dead? August, pp. 8–9
Lies, Phones And UNE-P, August, pp. 66–65
VOIP Regulation For Dummies, September, pp. 14–16
The Murky World Of VOIP, October, pp. 10–11
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Messaging Compliance: Why It Matters, October, pp. 39–43
E-911:Costs, Benefits and Pitfalls, November, pp. 60–62
ATM's Last Carrier Gasp? December. pp. 8–9

Remote Access

Application Performance Measurement: The State Of The Art, February, pp. 57–63
Wireless Data Comes Of Age, March, pp. 8–10
A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Broadband UNE Decision: Where's The Evidence? April, pp. 14–16
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
The Public Internet: Good Enough? June, pp. 14–16
Is Fiber To The Home Affordable? June, pp. 24–28
WiMax Hits The Road, June, pp. 30–37
What's The Fate Of Frame? July, pp. 36–38
Juniper Targets "Customer Edge" With New Routers, July, p. 62
Switching vs. Routing Redux (Part II), August, pp. 14–15
Metro Ethernet Provides 911 For Bandwidth, August, pp. 60–62
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
How To Negotiate An MPLS Contract, September, pp. 48–53
Today's Hybrid IP-VPN Market, October, pp. 12–13
Economics Of QOS On WAN Access Lines, October, pp. 16–22
MPLS Migration: A Customer Story, November, pp. 14–15
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
WiMax: Broadband Wireless Access And Beyond, November, pp. 46–53
The NAT Traversal Problem, December pp. 12–13
Portable Security: Safeguarding PDAs And Smartphones, December, pp. 19–23
Procuring Managed IP-VPNs, December, pp. 24–26
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Avaya Aims At Mid-Sized Contact Center, December, p.60

Resiliency/Survivability

Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Rethinking Network Security, February, pp. 16–20
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Power Protection—Pay A Little Now, Or A Lot Later, February, pp. 52–56
Small IP-PBXs: Another Close Race, April, pp. 36–51
High Availability In Routing, May, pp. 48–51
Will SONET Changes Change The Future? June, pp. 8–9
Siemens Targets Centralized VOIP, June, pp. 62–63
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Nortel Enhances Enterprise Portfolio, October, pp. 62–63
Layer 1 Switches Offer Resiliency, November, pp. 54–57

Routers/Routing Technology

Are Smart Networks Dumb? February, pp. 14–15
High Availability In Routing, May, pp. 48–51
Ethernet At The Multiservice Edge, June, pp. 18–22
Switching vs. Routing Redux (Part I), July, pp. 18–19
Juniper Targets "Customer Edge" With New Routers, July, p. 62
Switching vs. Routing Redux (Part II), August, pp. 14–15
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
The NAT Traversal Problem, December pp. 12–13
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Foundry Expands 10-Gig Offerings, December, p. 61

Security

Treating WLAN Users As Hostile, January, pp. 14–15
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Instant Messaging: Time For IT To Pay Attention, January, pp. 50–53
Are Smart Networks Dumb? February, pp. 14–15
Rethinking Network Security, February, pp. 16–20
Extending The VOIP Network Boundary, February, pp. 22–25
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Ready Or Not, Video Chat Is Here, March, pp. 14–16
Planning Steps For Wireless LANs, March 2004, pp. 18–20
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52–55
Spam Fighting Business Models—Who Wins, Who Loses, April, pp. 24–29
Small IP-PBXs: Another Close Race, April, pp. 36–51
Locking Down The Net, May, pp. 16–18
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
Next-Gen Firewalls: What To Expect, June, pp. 56–61
Cellphone Viruses: How Worried Should You Be? July, p. 14
The Case For Automation In Security, July, p. 64
Enabling Enterprise Wi-Fi, August, pp. 45–53
In Search Of The Smartest Sentry, August, pp. 54–59
Taking Control Of Your Airwaves, October, pp. 24–32
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
Enemy At The Gates: The Evolution Of Network Security, December, pp. 14–18
The NAT Traversal Problem, December pp. 12–13
Portable Security: Safeguarding PDAs And Smartphones, December, pp. 19–23

Standards

Instant Messaging: Time For IT To Pay Attention, January, pp. 50–53
Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Can IP-PBXs Go Open Source? February, p. 12
Are Smart Networks Dumb? February, pp. 14–15
Rethinking Network Security, February, pp. 16–20
Extending The VOIP Network Boundary, February, pp. 22–25
Beyond The Wired Desktop Telephone, February, pp. 41–44
Public ENUM—How Important Is It? March, pp. 26–30
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48

SIP State Of Affairs, April, pp. 30–35
Small IP-PBXs: Another Close Race, April, pp. 36–51
New Tools For Web Services Management, April, pp. 52–57
The Future Of Presence, May, pp. 40–43
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
High Availability In Routing, May, pp. 48–51
Storage And Applications: Tales From The Trenches, May, pp. 52–55
Interactive IP Telephone Capabilities, May, pp. 58–62
Will SONET Changes Change The Future? June, pp. 8–9
Ethernet At The Multiservice Edge, June, pp. 18–22
WiMax Hits The Road, June, pp. 30–37
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42–45
Metro Ethernet Offers Opex Gains, July, pp. 40–43
Portlet Standards Accelerate Web Portal Development, July, pp. 57–61
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Will MPLS Transform Optical Networking As We Know It? October, pp. 51–56
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
WiMax: Broadband Wireless Access And Beyond, November, pp. 46–53
The NAT Traversal Problem, December pp. 12–13
The MPLS UNI And End-To-End QOS, December, pp. 27–32
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

Storage Networking

Storage And Applications: Tales From The Trenches, May, pp. 52–55
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50

Switches/Switching Technology

Getting Voice On Your Wireless LAN, January, pp. 41–46
Extreme Networks' Gigabit Edge Switch, February, p. 64
Planning Steps For Wireless LANs, March, pp. 18–20
Gigabit Desktop Transition: Where Are We? March, pp. 38–41
Foundry Switch Slashes 10-Gig Price, April, p. 62
Ethernet At The Multiservice Edge, June, pp. 18–22
Switching vs. Routing Redux (Part I), July, pp. 18–19
Switching vs. Routing Redux (Part II), August, pp. 14–15
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Next-Gen Switch/Router Design Issues, October, pp. 44–50
Layer 1 Switches Offer Resiliency, November, pp. 54–57

Telephone Sets

IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Can IP-PBXs Go Open Source? February, p. 12
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Beyond The Wired Desktop Telephone, February, pp. 41–44
NEC Introduces New Platform Offerings, March, pp. 60–61
SIP State Of Affairs, April, pp. 30–35
Small IP-PBXs: Another Close Race, April, pp. 36–51
Interactive IP Telephone Capabilities, May, pp. 58–62
IP-Telephony—New Technology, Familiar Motivations, May, pp. 66–65
Best Practices In Managing Wireless Communications, June, pp. 46–48
Siemens Targets Centralized VOIP, June, pp. 62–63
EADS Telecom Debuts Newest Converged Platform, June, p. 63
Cellphone Viruses: How Worried Should You Be? July, p. 14
WLANs And Cellular Unite, September, pp. 18–19
In Search Of The VOIP Killer App, September pp. 20–29
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Nortel Enhances Enterprise Portfolio, October, pp. 62–63
Getting The IP-PBX To Work: Fire, Ready, Aim, November, pp. 42–45

"Transforming Telephony"—Supplement To October BCR

Architectures For Convergence, pp. 4–8
A Roadmap To Convergence, pp. 9–14
The Payoff: Killer Applications, pp. 15–18
Making The Business Case For IP-Telephony, pp. 19–22

Video

Ready Or Not, Video Chat Is Here, March, pp. 14–16
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
In Search Of The VOIP Killer App, September, pp. 20–29
Videoconferencing Over IP—The Switch Is On, September, p. 62
New Paradigms In Enterprise Video, November, pp. 38–41
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42

Voice-Data Convergence

New Year, New Beginnings, January, p. 2
VOIP: This Year's Model, January, p. 4
IP-Telephony Drives PBX Market Resurgence, January, pp. 18–24
Large IP-PBXs: A Well-matched Quartet, January, pp. 26–40
Getting Voice On Your Wireless LAN, January, pp. 41–46
Siemens' Upgraded HiPath 4000, January, pp. 62–63
Avaya Releases Communication Manager 2.0, January, p. 63
Can IP-PBXs Go Open Source? February, p. 12
Extending The VOIP Network Boundary, February, pp. 22–25
Small-Medium IP-PBXs Morph Into High End, February, pp. 26–39
Beyond The Wired Desktop Telephone, February, pp. 41–44
IP-Telephony Applications: What's All The Fuss? February, pp. 46–51
Power Protection—Pay A Little Now, Or A Lot Later, February, pp. 52–56
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
NEC Introduces New Platform Offerings, March, pp. 60–61
Managing The Migration To IP-VPN Services, April, pp. 19–23
SIP State Of Affairs, April, pp. 30–35
Small IP-PBXs: Another Close Race, April, pp. 36–51
What Are These People Thinking? April, pp. 66–65
Are The RBOCs Making Their Move? May, p. 12
Designing Converged Networks For Manageability, May, pp. 24–28
Building A Credible And Conservative ROI For VOIP, May, pp. 30–32
Open Source: A New IP-PBX Option, May, pp. 36–39
The Future Of Presence, May, pp. 40–43
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
Interactive IP Telephone Capabilities, May, pp. 58–62
IP-Telephony—New Technology, Familiar Motivations, May, pp. 66–65
The Battle For The Enterprise Collaboration Desktop, June, pp. 10–12
Ethernet At The Multiservice Edge, June, pp. 18–22
Managing Enterprise VOIP: The Case For A New Standard, June, pp. 42–45
Best Practices In Managing Wireless Communications, June, pp. 46–48
Siemens Targets Centralized VOIP, June, pp. 62–63
EADS Telecom Debuts Newest Converged Platform, June, p. 63

Cost Control And Converged Networks, July, pp. 28–31
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Local Realities Govern Global Telecom, July, p. 66
Open Voices: Linux And VoiceXML In The Call Center, August, pp. 16–22
IP Call Centers: More Practical Than You Think, August, pp. 24–27
Understanding Vendor Strategies For VOIP, August, pp. 28–32
Carriers Extend And Expand Managed Services, August, pp. 39–44
Web Telephony: It's What's Next, August, p. 63
IP-Telephony's Second Wave, September, p. 2
What's The Big Idea? September, p. 4
Preparing For Converged Mobile Communications, September, p. 12
VOIP Regulation For Dummies, September, pp. 14–16
WLANs And Cellular Unite, September, pp. 18–19
In Search Of The VOIP Killer App, September, pp. 20–29
VOIP Doesn't Matter, September, pp. 30–33
Benefits Of IP-Telephony Design: Survivable Remotes, September, pp. 34–40
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Motorola, Proxim, Avaya Team For Mobility, September, pp. 60–61
Customers Need To Chart Path To Convergence, October, p. 2
The Murky World Of VOIP, October, pp. 10–11
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Economics Of QOS On WAN Access Lines, October, pp. 16–22
Enterprises Are Drinking The SIP Kool-Aid—And Buying It, Too, October, pp. 35–38
Nortel Enhances Enterprise Portfolio, October, pp. 62–63
The Balancing Act: Using Touch-tone And Speech, November, pp. 58–59
Negotiating Managed Network Contracts, November, pp. 22–26
New Paradigms In Enterprise Video, November, pp. 38–41
Getting The IP-PBX To Work: Fire, Ready, Aim, November, pp. 42–45
The NAT Traversal Problem, December pp. 12–13
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42
Ready! Getting the IP-PBX To Work: Plan, Then Assess, December, pp. 43–46
Avaya Aims At Mid-Sized Contact Center, December, p.60

Voice Services

Extending The VOIP Network Boundary, February, pp. 22–25
Public ENUM—How Important Is It? March, pp. 26–30
Internet Telephony In Europe: No More Flying Under The Radar Screen, March, pp. 32–33
What Are These People Thinking? April, pp. 66–65
The Gloves Are Off In Plain Old LD Voice, July, pp. 24–26
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Is Telecom Competition Dead? August, pp. 8–9
Managed Services: Lessons From The Field, August, pp. 34–38
VOIP Regulation For Dummies, September, pp. 14–16
Shifts In Spending—Consumer Market, September, pp. 66–65
The Murky World Of VOIP, October, pp. 10–11
Taxing VOIP: Consider The Alternative, October, pp. 14–15
Don't Gloat Over The Carriers' Troubles, October, p. 66
Negotiating Managed Network Contracts, November, pp. 22–26

VPNs (Virtual Private Networks)

A Golden Moment For Enterprise Data Services Procurements, March, pp. 22–24
Bandwidth Bag Of Tricks, April, pp. 17–18
Managing The Migration To IP-VPN Services, April, pp. 19–23
Are The RBOCs Making Their Move? May, p. 12
MPLS: Has It Achieved Critical Mass? May, pp. 44–47
The Public Internet: Good Enough? June, pp. 14–16
What's The Fate Of Frame? July, pp. 36–38
Switching vs. Routing Redux (Part II), August, pp. 14–15
Managed Services: Lessons From The Field, August, pp. 34–38
Carriers Extend And Expand Managed Services, August, pp. 39–44
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
How To Negotiate An MPLS Contract, September, pp. 48–53
Today's Hybrid IP-VPN Market, October, pp. 12–13
MPLS Migration: A Customer Story, November, pp. 14–15
SSL VPNs—An Independent Taxonomy, November, pp. 28–33
Overcoming MPLS VPN Application Classification Challenges, November, pp. 34–36
Procuring Managed IP-VPNs, December, pp. 24–26
The MPLS UNI And End-To-End QOS, December, pp. 27–32

Web Services

CIOs' Balancing Act, February, pp. 8–10
An Evolving Architecture For The Management Of Digital Identity, March, pp. 42–48
Enterprise Digital Rights Management: Ready For Prime Time? March, pp. 52–55
Will Web Services Mean The End Of Network Intelligence? April, pp. 10–12
New Tools For Web Services Management, April, pp. 52–57
Portlet Standards Accelerate Web Portal Development, July, pp. 57–61
Wrestling XML Down To Size: Reducing The Burden On Networks And Servers, December, pp. 35–38

Wireless

Wireless LAN Market Magic, January, p. 12
Treating WLAN Users As Hostile, January, pp. 14–15
Getting Voice On Your Wireless LAN, January, pp. 41–46
Are Smart Networks Dumb? February, pp. 14–15
Beyond The Wired Desktop Telephone, February, pp. 41–44
Controlling Cellular Costs, February, p. 66
Free Riding = Freeloading, March, p. 2
Wireless Data Comes Of Age, March, pp. 8–10
Planning Steps For Wireless LANs, March, pp. 18–20
Understanding Wi-Fi Performance, March, pp.34–37
Location Tracking Increases The Value Of Enterprise WLANs, May, p. 14
The End Of Spectrum Scarcity? May, pp. 20–22
WiMax Hits The Road, June, pp. 30–37
Best Practices In Managing Wireless Communications, June, pp. 46–48
Cellphone Viruses: How Worried Should You Be? July, p. 14
A New Era In Telecom Regulation, July, pp. 20–23
Taming The TCO Of The Mobile Enterprise, July, pp. 32–35
Enabling Enterprise Wi-Fi, August, pp. 45–53
Preparing For Converged Mobile Communications, September, p. 12
WLANs And Cellular Unite, September, pp. 18–19
Roaming Far And Wide With Mobile VPNs, September, pp. 42–47
Demands Shift For Next-Gen Switch/Routers, September, pp. 54–59
Motorola, Proxim, Avaya Team For Mobility, September, pp. 60–61
Taking Control Of Your Airwaves, October, pp. 24–32
Closed Architectures, Closed Systems And Closed Minds, October, pp. 57–61
RFID: Network Implications, November, pp. 16–17
Telecom In Developing Nations, November, pp. 18–20
WiMax: Broadband Wireless Access And Beyond, November, pp. 46–53
Telecom Asia: Shape Of Tomorrow's Telecom, November, p. 66
Portable Security: Safeguarding PDAs And Smartphones, December, pp. 19–23
Client Convergence: Unifying Real-Time Communications, December, pp. 39–42
Applications Go Wireless: The New Mobility Wave, December, pp. 58–59□